

Application No.: 10/827,421

Amendments to the Drawings:

Figs. 5, 7, and 8 have been amended to properly designate the Cr-poor and Cr-rich material as such. The amendments are shown in the attached Replacement Sheets.

REMARKS

This Amendment is being filed in response to the Office Action mailed January 4, 2007. For the following reasons this application should be allowed and the case passed to issue. No new matter is introduced by this amendment. Support for the amendments to claim 1 is found in claims 3, 4, 6, 7, and 15, as originally filed and page 7, lines 18-24 of the specification. Claims 2, 5, and 16 are amended to maintain proper dependency. Claims 8 and 21 are amended to correct informalities. Originally filed claims 1, 3, 4, 6, and 7 support the amendment to claim 12.

Claims 1, 2, 5, 8-10, 12, and 16-21 are pending in this application. Claims 1-21 have been rejected. Claims 1, 2, 5, 8, 12, 16, and 21 have been amended in this response. Claims 3, 4, 6, 7, 11, and 13-15 have been canceled in this response.

Claim Rejections Under 35 U.S.C. § 112

Claims 8 and 21 were rejected under 35 U.S.C. § 112 as being indefinite because it was allegedly unclear whether the CuML in claim 8 was referring to an additional CuML layer, and how the non-magnetic interlayer of claim 21 was related to the rest of the structure of the medium. These rejections are traversed, and reconsideration and withdrawal thereof respectfully requested.

Claims 8 and 21 have been amended to address the asserted informalities. Applicants submit that the claims fully comport with the requirements of 35 U.S.C. § 112.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-7 were rejected under 35 U.S.C. § 102(b) as being anticipated by JP 8-31638. This rejection is traversed, and reconsideration and withdrawal thereof respectfully requested. The following is a comparison between the invention, as claimed, and the cited prior art.

JP 8-31638 does not anticipate the claimed magnetic recording medium because JP 8-31638 does not disclose a magnetic recording medium including Cu-containing magnetic recording layers (CuML) comprised of a stacked bi-layer structure [Cr-rich CuML/Cr-poor CuML]_n, where $n = 1$ to 10 and the [Cr-rich CuML/Cr-poor CuML] bi-layer is comprised of a Cr-rich, Cu-containing magnetic recording layer (Cr-rich CuML) that includes a Cr-rich magnetic alloy material and a Cr-poor, Cu-containing magnetic recording layer (Cr-poor CuML) that includes a Cr-poor magnetic alloy material, as required by claim 1.

Claims 1, 3, 5-15, 20 and 21 were rejected under 35 U.S.C. § 102(e) as being anticipated by Okuyama et al. (U.S. Pat. No. 6,682,834).

Claims 1, 5-11, 13, and 16-21 were rejected under 35 U.S.C. § 102(e) as being anticipated by Ajan (U.S. Pat. No. 7,074,508).

These rejections are traversed, and reconsideration and withdrawal thereof respectfully requested. The following is a comparison between the invention, as claimed, and the cited prior art.

Okuyama et al. and Jan do not anticipate the claimed magnetic recording medium because Okuyama et al. and Jan do not disclose a magnetic recording medium including Cu-containing magnetic recording layers (CuML) comprised of a **stacked bi-layer structure [Cr-rich CuML/Cr-poor CuML]_n**, where $n = 1$ to 10 and the [Cr-rich CuML/Cr-poor CuML] bi-layer is comprised of a Cr-rich, Cu-containing magnetic recording layer (Cr-rich CuML) that includes a Cr-rich magnetic alloy material; a Cr-poor, Cu-containing magnetic recording layer (Cr-poor CuML) that includes a Cr-poor magnetic alloy material, wherein the Cr-rich layer contains at least 16% Cr and the Cr-poor layer contains less than 16% Cr, as required by claim 1; and Okuyama et al. do not disclose a magnetic recording medium including Cu-containing

magnetic recording layers (CuML) comprised of at least one Cu-free magnetic recording (ML) comprised of a **stacked tri-layer structure [ML/Cr-rich CuML/Cr-poor CuML]_n**, where $n = 1$ to 10 and each [ML/Cr-rich CuML/Cr-poor CuML] tri-layer is comprised of a Cu-free magnetic recording layer (ML); a Cr-rich, Cu-containing magnetic recording layer (Cr-rich CuML) comprised of a Cu-containing magnetic alloy material; a Cr-poor, Cu-containing magnetic recording layer (Cr-poor CuML), wherein the Cr-rich layer contains at least 16% Cr and the Cr-poor layer contains less than 16% Cr, as required by claim 12. Okuyama et al. and Jan do not disclose a magnetic recording medium comprising **both** the Cr-rich and Cr-poor layers as required by claims 1 and 12.

The factual determination of lack of novelty under 35 U.S.C. § 102 requires the disclosure in a single reference of each element of a claimed invention. *Helifix Ltd. v. Blok-Lok Ltd.*, 208 F.3d 1339, 54 USPQ2d 1299 (Fed. Cir. 2000); *Electro Medical Systems S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994); *Hoover Group, Inc. v. Custom Metalcraft, Inc.*, 66 F.3d 399, 36 USPQ2d 1101 (Fed. Cir. 1995); *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051 (Fed. Cir. 1987). Because JP 8-31638 does not disclose a magnetic recording medium including Cu-containing magnetic recording layers (CuML) comprised of a stacked bi-layer structure [Cr-rich CuML/Cr-poor CuML]_n, where $n = 1$ to 10 and the [Cr-rich CuML/Cr-poor CuML] bi-layer is comprised of a Cr-rich, Cu-containing magnetic recording layer (Cr-rich CuML) that includes a Cr-rich magnetic alloy material; and a Cr-poor, Cu-containing magnetic recording layer (Cr-poor CuML) that includes a Cr-poor magnetic alloy material, as required by claim 1; and Okuyama et al. and Jan do not disclose a magnetic recording medium including Cu-

containing magnetic recording layers (CuML) comprised of a stacked bi-layer structure [Cr-rich CuML/Cr-poor CuML]_n, where $n = 1$ to 10 and the [Cr-rich CuML/Cr-poor CuML] bi-layer is comprised of a Cr-rich, Cu-containing magnetic recording layer (Cr-rich CuML); and a Cr-poor, Cu-containing magnetic recording layer (Cr-poor CuML) of a Cr-poor magnetic alloy material, wherein the Cr-rich layer contains at least 16% Cr and the Cr-poor layer contains less than 16% Cr, as required by claim 1; and Okuyama et al. do not disclose a magnetic recording medium including Cu-containing magnetic recording layers (CuML) comprised of at least one Cu-free magnetic recording (ML) comprised of a **stacked tri-layer structure [ML/Cr-rich CuML/Cr-poor CuML]_n**, where $n = 1$ to 10 and each [ML/Cr-rich CuML/Cr-poor CuML] tri-layer is comprised of a Cu-free magnetic recording layer (ML); a Cr-rich, Cu-containing magnetic recording layer (Cr-rich CuML) comprised of a Cu-containing magnetic alloy material; and a Cr-poor, Cu-containing magnetic recording layer (Cr-poor CuML) of a Cr-poor magnetic alloy material, wherein the Cr-rich layer contains at least 16% Cr and the Cr-poor layer contains less than 16% Cr, as required by claim 12; JP 8-31638, Okuyama et al., and Jan do not anticipate claims 1 and 12.

Applicants further submit that JP 8-31638, Okuyama et al., and Jan, whether taken alone, or in combination do not suggest the claimed magnetic recording media.

The dependent claims are allowable for at least the same reasons as claim 1 and further distinguish the claimed magnetic recording medium.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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